

(57) Abstract

A method (600) for preparing an interfrequency handover of a certain communication connection from a first frequency to a second frequency, comprises the following steps of: periodically intermitting (603) the transmission/receipt of data on the first frequency for certain transmission gaps, where the number of transmission gaps is at least one during each transmission period and a certain sequence of transmission periods (420, 520) is used, and performing (607) measurements on the second frequency during the transmission gaps on the first frequency. In the step of intermitting the transmission/receipt of data the transmission/receipt of data is intermitted within at least one transmission period for a certain transmission gap (311, 411) having a first duration and for a certain second transmission gap (312, 412) having a second duration, which second duration is different from the first duration. A mobile station (700), a network element (710) and a network control element (720) are also presented.

Figure 3.